

### ABSTRACT OF THE DISCLOSURE

The present invention discloses an air-entrainment mechanism for carbureted engine. The mechanism includes a plunger valve controlled by a solenoid. The solenoid is powered by a battery with a switch electrically coupled thereto. The plunger valve is interconnected  
5 to the carburetor to allow additional air entrainment. The solenoid is coupled to the valve for opening and closing the valve. The switch electrically couples the solenoid to the battery to activate the solenoid for movement of the valve. The switch disclosed herein includes a temperature sensor and an engine-running sensor. The switch is then closeable when the temperature sensor detects an engine temperature within a predetermined range as long as the  
10 engine is not already running.